

March 6, 1991

DEC Commissioner  
Box 0  
Juneau, AK 99811-1800

Dear Commissioner:

I am writing about my concern regarding the MAPCO Refinery in North Pole, Alaska. The hazardous conditions occurring at the refinery have been brought to my attention, and I find them appalling in the present age of environmental awareness. We must take extreme measures to ensure clean air and ground water. It seems very feasible to use the best technology on the air strippers to ensure such safety.

Also, I do believe it is important to involve the public in the clean up process with open meetings. As you know, big business does not always have the community at interest.

Please, let's get this mess cleaned up correctly, even if it becomes costly. It is important.

Sincerely,

*Carol L. Roblee*

Carol L. Roblee  
P.O. Box 55801  
North Pole, AK 99705  
488-2076

*Jeff H  
Facility fees*

CC

MCS

326  
AL0701  
3/6/91 HOC  
Sander  
(ltr + pamphlet)  
Keltner.  
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COMMISSIONER'S OFFICE

IMAGED

## How Can I Protect My Health ?

You can demand two things; (1) you have a right to clean air and water, and (2) MAPCO must reveal the how and why of the hazardous waste problems.

1. Pollution control technology for air strippers is available, inexpensive, and effective. It is pointless to clean up the ground water by dumping pollution in the air where even more people will be unknowingly placed at risk.

2. MAPCO is keeping secret information about a major hazardous waste clean up. Federal laws require public hearings before the clean up can be approved. These hearings were never held.

## What Exactly Should I Do ?

### WRITE A SHORT LETTER NOW

Write DEC at the address below.

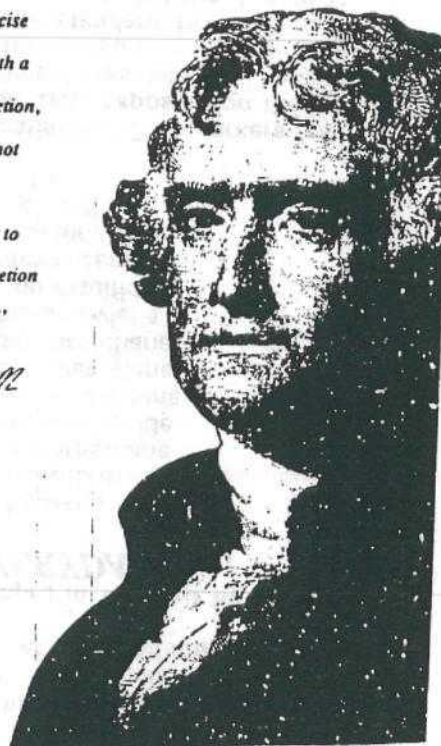
1. I want the best air pollution control technology on the air strippers, as well on all other MAPCO benzene emissions.
2. I demand a hearing in North Pole for public approval on "how clean is clean" regarding MAPCO's clean up.

Even if you don't live in North Pole, it is especially important to write because there are over 800 other contaminated sites that are now using or may in the future use air stripping methods for cleaning up ground water pollution.

DEC Commissioner  
Box O  
Juneau, Alaska 99811-1800

*"I know no safe  
depository of the  
ultimate powers  
of the society but the  
people themselves;  
and if we think  
them not enlightened  
enough to exercise  
their control with a  
wholesome discretion,  
the remedy is not  
to take it  
from them, but to  
inform their discretion  
by education."*

*Th Jefferson*

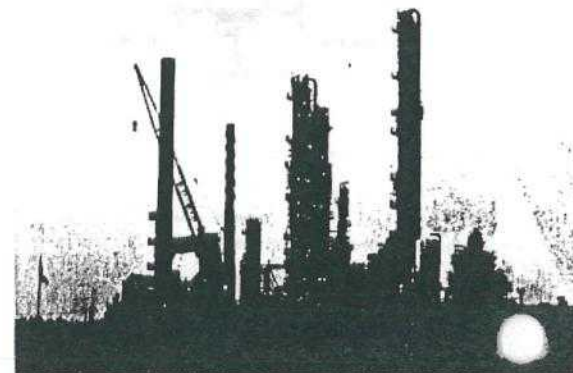


## Is MAPCO Polluting Your Air ?

The MAPCO refinery in North Pole is using the air we breathe for a dump. A "clean up" method called *air stripping* simply puts cancer causing chemicals from the contaminated ground water into the air.

## What Did MAPCO Dump ?

Hundreds of thousands of gallons of fuel were spilled on the ground and at least 180 barrels of hazardous waste were intentionally dumped into leaky sewers. During "clean up" operations MAPCO violated additional federal and state laws by shipping 231 barrels of listed hazardous waste to Anchorage, dumping the residues into a landfill neither permitted nor designed for hazardous wastes.



## Why Haven't I Heard About These Problems Before ?

MAPCO told the Environmental Protection Agency that "oil spill reports, soil & water analyses, and concentrations of aromatics and halogens in water" were COMPANY SECRETS AND CONFIDENTIAL. Only after citizens made Freedom of Information Act requests did these pollution problems become known.



## Risks to Public Health A Citizen Viewpoint

MAPCO spilled and dumped cancer causing chemicals up hill from a public school and the North Pole community well. MAPCO leases the refinery property from the state, so this pollution of the soil and ground water is on public lands. Yet MAPCO states in their "Community Relations Plan" *there is no need for any community involvement in the investigation.*

In the past, MAPCO endangered its own employees by contaminating a drinking water well. Today, MAPCO is moving pollution from the ground water to the air thereby increasing the risk of cancer to unknowing residents. Tomorrow, if filters were required on the air strippers, pollution could be controlled.



"Put it in  
your own  
back yard!"

The ground water is extremely polluted; for example, one pollutant called benzene, exceeds the drinking water standard by as much as 3,800 times. All the pollution is currently dumped into the air we breathe. The amount of benzene people breathe night and day depends on the wind and rain.

## A Scientific Review

Benzene is used to increase the octane rating in gasoline. The vapors are colorless. Exposure at high concentrations is fatal within minutes. All exposures to benzene increase the risk of *leukemia*, a disease characterized by excess production of abnormal white cells, in other words cancer of the bone marrow.

Besides benzene MAPCO contaminated ground water with 7 additional cancer causing chemicals; 3 that cause birth defects; another that causes liver and kidney damage; and one that causes irregular heart beats but has not been tested for cancer or reproductive effects.

### Toxic Chemicals Dumped in Your Air by MAPCO **EVERYDAY**

benzene  
chloroform  
1,2 dichloroethane  
methylene chloride  
1,2 dichlorobenzene  
tetrachloroethylene  
1,1 dichloroethane  
trichloroethylene  
carbon disulfide  
ethylbenzene  
acetone  
phenol  
freon

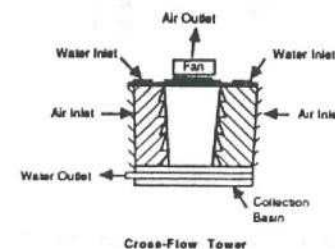
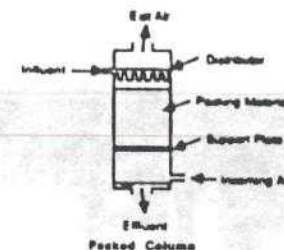
Unfortunately, an estimated 200 workers may have died due to benzene exposure on the job because the government was delayed 11 years due to an industry lawsuit in lowering a regulated work place standard from 10 ppm to 1 ppm. Many scientists believe 1 ppm is still too high to protect workers and the National Institute of Occupational Safety and Health has recommended another tenfold decrease to 0.1 ppm.

Who benefits? Who bears the risk? Who decides what an "acceptable level of cancer risk" is from benzene exposure? And what about entire families exposed around the clock? Work place standards are only intended for healthy adults exposed for only five 8 hour work days per week and cannot be used to assess community exposures. In addition, the effects of multiple exposures are not well studied or understood, as is the case for the North Pole community.

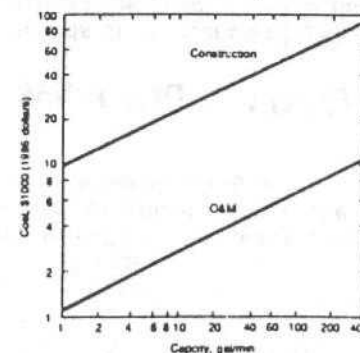
## An Engineering Analysis

Benzene is effectively and cheaply removed from either air or water with activated carbon filters. A simple unit capable of treating well over 100,000 gallons a day can be built for less than \$50,000 and costs less than \$20/day to operate. Activated carbon filters can remove benzene from either contaminated ground water or air.

### Types of Air Stripping Equipment



Estimated costs of various sizes of  
Activated Carbon Adsorption Units.





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acetone  
phenol  
freon

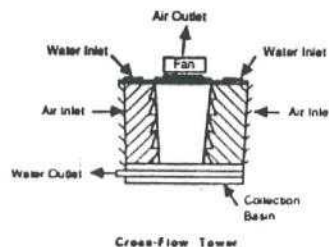
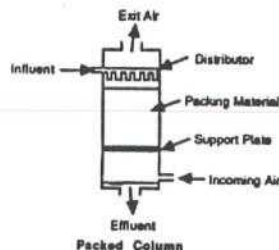
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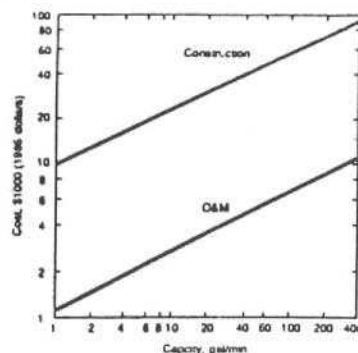
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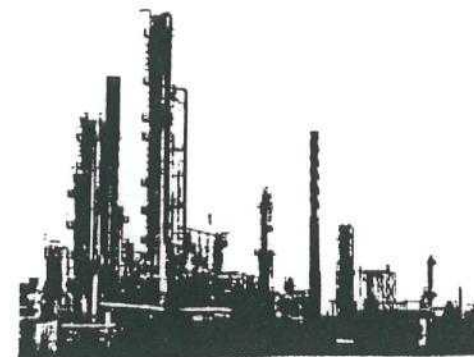
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## A Legal Evaluation



Any increase in benzene emissions brings a facility within the scope of the air quality program known as "Prevention of Significant Deterioration." Since operation of the air strippers results in the release of significant quantities of benzene, MAPCO would ordinarily be required to install pollution control technology that is considered BAT. The Alaska Department of Environmental Conservation apparently does not intend to require the "best available technology" (BAT) on air strippers under an air permit. Although this decision rests on questionable legal analysis, a state permit that ignores the new regulations does not insulate MAPCO from violations of the federal Clean Air Act.

If the state fails to require compliance with the Clean Air Act, EPA has the authority and the responsibility to do so. In addition, citizens are authorized to file law suits against violators of the Clean Air Act under circumstances like these.

This public health alert is funded by the **Alaska Conservation Foundation**. Preparation of this alert is the responsibility of **Science & Law Limiting Toxics (SALT)**.

**SALT** is a nonprofit group of citizens, scientists, engineers, and environmental attorneys helping Alaskans affected by pollution. For more information regarding MAPCO pollution call or write:

**SALT**  
Box 101255  
Anchorage, Alaska 99510  
(907) 276-2721

OFFICE OF THE COMMISSIONER  
P.O. BOX 0, JUNEAU, AK 99811-1800

Telephone:  
(907) 465-2600

March 27, 1991

Ms. Carol L. Roblee  
P.O. Box 55801  
North Pole, AK 99705

Dear Ms. Roblee:

Thank you for your letter of March 6, 1991, concerning cleanup operations at the MAPCO refinery in North Pole.

The Department and the U.S. Environmental Protection Agency (EPA) began working actively with MAPCO more than five years ago to investigate and correct fuel spill and waste management problems at the North Pole Refinery. Cleanup of spilled fuel is being conducted under the terms of a compliance order with the Department. Hazardous waste management problems are being handled under administrative orders issued by EPA. We believe that no hazardous conditions have been created by the cleanup operations at the refinery and that groundwater contamination problems are being cleaned up properly. The MAPCO refinery air emissions meet State Air Quality Control standards and, as such, are not considered by EPA or the State to be a health hazard.

The Department has not required controls for benzene emissions from the air stripping operation, because MAPCO has agreed to reduce a greater quantity of benzene vapor emissions from the railcar loading racks, in lieu of emission controls on the air



strippers. Under existing State regulations, the Department could impose emission controls on the air strippers, but not on the fuel loading racks. MAPCO's commitment to decrease benzene emissions by 1.3 tons per year from the railcar loading racks, as compared to 0.5 tons per year from the air strippers, will result in less potential public exposure to benzene vapors than if emission controls were imposed only on the air strippers under our regulatory authority.

Benzene emissions from refineries and tank farms have not been regulated by EPA to date, because, on a national basis EPA has determined that these emissions do not impose a significant public health risk. The Department currently is re-examining EPA's findings, since fuels refined in Alaska have a higher benzene content than the fuels typically produced in other states. In addition, new standards may be adopted by EPA as a result of the Clean Air Act Amendments of 1990, which require application of Maximum Achievable Control Technology for hazardous air pollutants from certain types of sources.

MAPCO conducts a community briefing program, consisting of periodic meetings and newsletters to advise members of the North Pole community of pollution investigation and cleanup actions at the refinery. You may wish to contact MAPCO to learn more about this program. You also may contact Mr. Pete McGee, Supervisor of the Department's Northern Regional Office in Fairbanks, at 451-2360, if you have additional questions or would like further

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I appreciate that you have written me with your concerns.

Sincerely,

John A. Sandor  
Commissioner

cc: Keith Kelton  
Pete McGee, NRO

bcc: Mayor Carleta Lewis, City of North Pole  
Gerald Fritz, MAPCO - North Pole Refinery